

Title (en)

Optical resolution of chlorohydrin with microorganism

Title (de)

Optische Trennung von Chlorhydrin mittels Mikroorganismus

Title (fr)

Résolution optique de chlorhydrine avec des microorganismes

Publication

EP 0745681 A2 19961204 (EN)

Application

EP 96108451 A 19960528

Priority

JP 13018295 A 19950529

Abstract (en)

A novel method for preparing an optically active chlorohydrin compound and an optically active 1,2-diol compound and/or optically active 3-hydroxy- γ -butyrolactone which are useful as intermediates for preparing medicaments, agricultural chemicals, physiologically active substances and ferroelectric liquid crystals, which comprises treating a racemic chlorohydrin compound having the formula: $\text{R}_1\text{CH}_2\text{CH}(\text{R}_2)\text{CH}_2\text{CH}_2\text{CH}(\text{R}_3)\text{CO}_2\text{R}_4$ wherein R_1 is H or lower alkyl group; and R_2 is a substituted or unsubstituted lower alkyl group when R_1 is H; or R_2 is H when R_1 is a lower alkyl group with a microorganism, thereby selectively degrading only one of optical isomers thereof, and recovering the remaining other optically active chlorohydrin and isolating optically active 1,2-diol compound and/or optically active 3-hydroxy- γ -butyrolactone converted by the reaction.

IPC 1-7

C12P 41/00

IPC 8 full level

C12P 7/18 (2006.01); **C12P 17/04** (2006.01); **C12P 41/00** (2006.01)

CPC (source: EP US)

C12P 7/18 (2013.01 - EP US); **C12P 17/04** (2013.01 - EP US); **C12P 41/00** (2013.01 - EP US)

Cited by

EP1103620A1; EP1550730A1; EP1096019A1; EP1251180A3; US6406904B1; US6316233B2; US6395535B1; US7235399B2

Designated contracting state (EPC)

BE CH DE ES FR GB IT LI NL

DOCDB simple family (publication)

EP 0745681 A2 19961204; **EP 0745681 A3 19971112**; **EP 0745681 B1 20010829**; DE 69614760 D1 20011004; DE 69614760 T2 20020704; ES 2161942 T3 20011216; US 5776766 A 19980707

DOCDB simple family (application)

EP 96108451 A 19960528; DE 69614760 T 19960528; ES 96108451 T 19960528; US 65193596 A 19960521